

To: USDA Forest Service-International Activity Team

From: Yun Wu, Plant Pathologist, USDA Forest Service / Forest Health Technology Enterprise Team, 180 Canfield Street, Morgantown, WV 26505, Phone: 304-285-1594, Fax: 304-285-1564, E-mail: ywu@fs.fed.us

Subject: Chinese Delegation Visit the United States (9/18/05—9/28/05)

The main purpose of the visit was to enhance the international cooperation on the development of control tactics for control of invasive species between the Institute of Environment & Sustainable Development in Agriculture (formerly Institute of Biological Control), Chinese Academy of Agricultural Sciences (CAAS), P.R. China and the USDA Forest Health Protection. A Chinese delegation, organized by USDA Forest Service-FHTET, assisted by FS International Programs, and financial supported by Forest Service International Activity Team and FHTET, accompanied by **Yun Wu**, visited 8 universities and various Forest Service and ARS units/laboratories in the eastern United States from September 18 through 28 2005.

The CAAS was represented by two visitors, **Dr. Mei Xurong**, Director of the Institute and Director General of the Center for Management of Invasive Alien Species, Chinese Ministry of Agriculture, and **Fu Weidong**, Assistant Professor and Entomologist for the Biological Control Lab in the Institute, CAAS.
(See attached proposal)

9/18/05 (Sun)

The Chinese delegation arrived at the Washington/Dulles International Airport on Sunday night of 9/18/05. I met at the airport and we traveled to a hotel near University of Delaware at Newark, DE, for the next day activities.

9/19/05 (Mon)

AM: The group visited University of Delaware and met with Dr. Judith Hugh-Goldstein, Professor of Entomology & Wildlife Ecology, Ellen Lake and Matt Frye, graduate students. **Dr. Mei Xurong** gave a power point presentation about the Institute of and brief introduction about the Institute of Environment and Sustainable Development in Agriculture (IEDA). The institute merged from Agro-meteorology Institute and Bio-Control Institute in 2002. It has 1 Chinese academician, 140 employees, 25 professors, 46 associate professors, 49 doctor and 24 master candidates. It includes China-Japan Research and Development Center for Agriculture Technology; China-US Agro-Environment Center of Excellence; Sino-American Biological Control Laboratory; Key Laboratory of Agro- Environment and Climate Change, Ministry of Agriculture; Key Laboratory of Biological Control, Ministry of Agriculture; and Center for Management of Invasive Alien Species, Ministry of Agriculture. The major research fields at the institute are: agro-meteorology science; bio-safety and agro-ecology; agricultural economized water; agro-environmental engineering; bio-pesticide engineering; biological control. The institute has 7 laboratories based on research fields: Climate Change Lab, Agro-Disaster Mitigation & Agro-Ecology Lab, Agro-Environmental Engineering Lab, Water resource

& dry-land farming Lab, Biological Control Lab, Bio-safety Lab, and Bio-pesticide Engineering Lab. There are Journals: Journal of China's Bio-Control, and Journal of China's Agro-Weather.

Prof. Judith Hough-Goldstein gave a power point presentation about the overall biological control weed program at the department. Her two graduate students also gave power point presentations about post release evaluation of natural enemies for biological control of mile-a-minute weed (**Ellen Lake**), and laboratory host range testing of Kudzu biological control agents (**Matt Frye**).

PM: Visited ARS lab and met with Roger Fuster, Lab Director, Wu Jinquan, Post doctoral Entomologist, Kim Hoelmer, Research Entomologist, and two other post doctoral entomologists. **Dr. Roger Fuster** gave an overall introduction and a tour to the Lab; **Dr. Hoelmer** gave a brief introduction about soybean aphid biological control. **Dr. Wu Jinquan** showed us the work he is doing on ALB behavior, rearing Gypsy moth using artificial diet, and rearing ALB adults from infested tree segments. A field trip was made to mile-a-minute weed release sites in White Clay Creek area near the Delaware University. Both **Dr. Mei** and **Ms. Fu** were very excited to see establishment and the post release evaluation for a weevil of mile-a-minute weed, for which they have been involved in the long term cooperation with Forest Service-FHTET. We had dinner with Roger Fuster and his wife, and Charles Mason, Professor and Graduate Program Director of the Department of Entomology and Wildlife Ecology.

9/20/05 (Tue)

The group visited ARS Agriculture lab in Beltsville, Maryland. **Dr. Kevin Thorpe**, Research Entomologist of Insect Biological Control Lab, led us to the visitor center of the ARS Agricultural Lab. The information specialist gave us a slide show of research highlights for the ARS Lab and a tour to the field of the lab facilities. Dr Mei was interested in some of the research projects and would like to establish contacts for future cooperation. We visited Dr. Zhang Aijun, Research Chemist of the Chemicals Affecting Insect Behavior Lab, and his lab staff. **Dr. Zhang Aijun** showed us the detached fly antenna that connected to the gas chromatographic-electroantennographic detection (GC-EAD) system, and discussed possible future cooperation. The group also spent an hour at the National Agricultural Library.

9/21/05 (Wed)

We drove to Washington D. C and visited USDA Forest Service International Programs. **Kelli Young**, Asian-Pacific Program Specialist, gave a brief introduction about Forestry in the United States and the Forest Service organization. The group met with Kerry Britton, National Program Leader for Plant Pathology, Forest Health Protection, State and Private Forestry; Mary Ellen Dix, National Program Leader for Entomology and Ralph Holiday Crawford, National Program Leader for Rangeland Ecology Research, Vegetation Management and Protection Research, and Glen Contreras, Fisheries Research Specialist, Wildlife, Fish, Water & Air Research, Research & Development. **Mary Ellen Dix** gave a brief introduction on invasive species and related research in the Forest Service; **Kerry Britton** gave an overview on forest health protection program; **Ralph Holiday Crawford** gave a brief on invasive weed program;

and **Glen Contreras** gave an introduction on fisheries and watershed research for which **Dr. Mei** showed special interest and discussed for possible future contact.

9/22/05 (Thu)

The group visited several well-known locations in Washington D. C. (e.g., White House, Capital Hill, National Botanic Garden, and Smithsonian Museum of National History).

9/23/05 (Fri)

Flew to Jacksonville, Florida, and drove to the University of Florida in Gainesville. **Dr. Charudattan**, Professor of Plant Pathology Department, provided an overview of biological control programs, as well as a tour of the department of Plant Pathology and the campus.

9/24/04 (Sat) and 9/25/05 (Sun)

Drove to from Gainesville to Fort Lauderdale for next day meetings with scientists at the ARS Invasive Plant Research Lab.

9/26/05 (Mon)The

The group visited USDA ARS Invasive Plant Research Lab located in Fort Lauderdale, Florida. We met with **Ted Center**, Research Leader and Research Entomologist; **Min B. Rayamajhi**, Research Plant Pathologist; **Paul Madeira**, Plant Physiologist and supporting scientist, and **Liu Hong**, Post Doctoral Associates. **Ted Center** led us on a tour of their new lab and the new quarantine facilities followed by a conference room briefing of research highlights conducted in the research lab. Their main mission is managing aquatic and wetland weeds primarily using biological control and integrated control technologies. **Min** talked about his research on biological controls of several invasive plants using plant pathogens; and **Paul**, the Plant Physiologist, talked about his role, as a supporting scientist, on determining molecular differences between host plant species, which as part of the host range testing. **Ted** and three scientists, **Min**, **Paul Bratt**, Research Entomologist, from the research lab, and **Amy Ferriter**, Research Associate, from the Boise State University, joined the group for lunch.

9/27/05 (Tue)

Flew from Miami International Airport to Washington/Dulles International Airport in the morning, and spent the afternoon reviewing our contacts and labs for future cooperation.

9/28/05 (Wed)

The Chinese visitors flew from Washington/Dulles International Airport to Kennedy International Airport in New York, and flew to Beijing on 9/29/05, arrived at Beijing on 9/30/05.

Proposal

Request for International Activities:

Name: Mr. Mei Xurong, the Director, Dr. Qiu Dewen, the Deputy Director, and Fu Weidong, the Supervisory Technician

Chinese Academy of Agricultural Sciences, Environment & Sustainable Agriculture Research Institute (former Institute of Biological Control), P. R. China

Purpose:

To enhance biological control cooperation and broaden environmental related cooperation.

Approximate dates: 7-10 days

Description:

The Institute of Biological Control is a long time cooperator with FHTET on several biological control related projects (e.g., mile-a-minute weed, tree of heaven, Invasive plants and their natural enemies of Asian Origin, and Hemlock wooly adelgid).

Estimated cost: \$4,500 for domestic travel and per diem. They will pay for their own airfare

IAT:

FHP

Other (such as IP, FAO, etc.)

Supervisor Approval: